

Título:

Spectroscopic analysis and fitotoxicity of secondary metabolites synthetized by *Stemphylium lycopersici* isolates that differ in their virulence.

Autor/es:

MEDINA, ROCIO; FRANCO, MARIO EMILIO ERNESTO; GUSTAVO LUCENTINI; LÓPEZ, SILVINA
MARIANELA YANIL; JANINA ROSSO; MARIO SAPARRAT; BALATTI, PEDRO ALBERTO

Lugar:

Boston

Reunión:

Congreso; International Congress of Plant Pathology (ICPP) 2018: Plant Health in A Global Economy; 2018

Institución organizadora:

APS

Resumen:

Tomato gray leaf spot is caused by three necrotrophic species of the genus *Stemphylium*. Secondary metabolites (SMs) are a highly diverse set of low molecular mass bioactive compounds, which have been associated to different biological roles. We hypothesized that *S. lycopersici* isolates that differ on disease severity and their ability to sporulate synthetize a pool of soluble SMs that are different. Each isolate was grown on V8 and PDA plates at 25°C for 14 days. These cultures were lyophilized and used as source of soluble metabolites, being an aqueous extract obtained through sonication and ultrafiltration (0.22 µm pore-size membrane). Spectroscopic analysis of each extract was performed (UV-Vis absorption spectra and fluorescence?excitation-emission matrices). Fitotoxicity of extracts was evaluated in vitro by means of a detached leaflet assay. While the most of extracts showed an absorbance maximum at 450 nm, any absorbance peak was found for the extract from CIDEFI-213 isolate grown on V8 medium. However, fluorescence intensity and emission regions were different according both the fungi and medium used. A higher fluorescence was found in CIDEFI-216 extracts